Remarks/Arguments:

Claims 1-4, 8, 14, 15, and 18-22, were rejected under 35 U.S.C. 102(e) as being anticipated by Olkkonen, et al. (Olkkonen), U.S. Patent No. 6,407,999. The Official Action stated,

"Regarding claim 1, Olkkonen discloses a GPRS capable mobile terminal, comprising: processing circuitry for receiving and transmitting data and voice signals; and QoS logic circuitry for determining an implied QoS rating based upon a TLLI number received from a base station (column 1, line 67-column 2, line 11, column 4, lines 1-12, column 4, line 61-column 5, line 27)."

Contrary to what is stated in the Official Action, none of the cited passages of Olkkonen teach what is required by the claims. Specifically, column 1, line 67-column 2, line 11, does teach that a temporary logical link identity (TLLI) "gives the mobile station a TLLI identity for use during the GPRS connection. After the GPRS connection, the same TLLI can be reassigned to some other mobile station". Thus, as is conceded by the present Applicant, the existence of the TLLI is known for the purpose of providing an identity to a mobile station. Similarly, in the citations to column 4 of Olkkonen, the reference further elaborates upon the use of TLLI to provide identity information. Starting with column 4, line 61-column 5, line 22, Olkkonen teaches the use of quality of service ratings to differentiate service given for a particular terminal. Specifically, Olkkonen teaches that each packet is provided with a code indicating the quality of service to make decisions concerning priority. The priority can easily be changed by a two-bit identity without a separate message indicating a change in the change of quality of service. Moreover, Olkkonen states that when the quality of service changes in a separate message indicating the change is sent, it is not necessary to add a code indicating the quality of service to each separate packet. Olkkonen finally states, "packets destined to a mobile station do usually not have a mechanism for changing the quality of service during the session, so the quality of service is usually defined as a subscriber registers to use a GPRS connection".

Thus, as may be seen, Olkkonen specifically teaches a use of a two-bit identity that is provided usually with each packet to indicate the quality of service. In contrast to the present invention, Olkkonen requires a unique code be used. The present invention, on the other hand, is concerned with providing differentiated quality of service information without requiring the use of such a code. Accordingly, the present invention contemplates assigning existing TLLI values in a manner that allows a mobile terminal to determine (inferentially) an assigned quality of

service rating without requiring an additional code and, therefore, without requiring a signaling or interface change. For example, claim 1 specifically requires "QoS logic circuitry for determining an *implied* QoS rating based upon a TLLI number received from a base station" [emphasis added]. The QoS rating is "implied" because a discrete code is not being used to specify the quality of service. Rather, a characteristic of the TLLI is used to determine the "implied" quality of service rating. The quality of service rating may be specified by a base station by selecting a TLLI from a group of TLLI numbers wherein each group represents a different QoS category or class.

In one embodiment, a plurality of groups are provided wherein each group representing a QoS rating includes a range of numbers. In a second embodiment of the present invention, an even valued TLLI implies a first quality of service class or category, while an odd valued TLLI number implies a second quality of service category or class. Thus, while Olkkonen teaches the use of TLLIs to identify a mobile terminal, Olkkonen does not teach the use of TLLIs, without an added code, for implying a QoS category or class. As is stated in claim 7 of the present application, the mobile terminal determines a QoS rating assigned to it based upon a value of the received TLLI number and, responsive thereto, transmits communication signals at a data rate that corresponds to the determined QoS rating. Accordingly, Olkkonen does not teach or suggest what is required by the claims of the present invention and the Applicants respectfully urge that the claims as originally filed are not anticipated by Olkkonen. Because claim 1 is believed to be allowable over Olkkonen, each of the dependent claims that depend from claim 1 are also believed to overcome the rejection.

Claim 8 is a method claim that generally requires the same elements that claim 1 require, namely, that an assigned QoS rating is implied or, in claim 8, inferred, by "analyzing the value of the TLLI to determine a TLLI grouping and corresponding QoS rating". Olkkonen simply does not show this in any of the cited passages. Each of the dependent claims that are rejected over Olkkonen that depend upon claim 8 is believed to overcome the rejection along with claim 8.

Regarding claim 14, claim 14 requires "logic circuitry for determining a quality of service (QoS) rating based upon a received communication signal's numerical characteristics." As stated before, the numerical characteristics can relate to a particular grouping to which a TLLI belongs thereby implying a QoS rating that the mobile terminal may infer. As an

alternative embodiment, as is required in claim 16, the "numerical characteristic" can be the even or odd state of the TLLI number wherein each state reflects a specified QoS rating. As Olkkonen simply does not teach using numerical characteristics, as opposed to discrete numbers, for identifying an implied QoS rating that is to be inferred by the mobile terminal, Olkkonen simply does not anticipate any claim of the present application. At the risk of being repetitive, the same fundamental arguments apply with equal force to independent claim 21 which again requires "determining the QoS rating for wireless transmissions based upon a characteristic of the number". The specification is replete with explanations about how the characteristics of the TLLI numbers may be used to imply a QoS rating and therefore fully supports the requirements by each of the independent claims here in this application.

Regarding the reference to Monrad, et al. (Monrad), U.S. Patent No. 6,208,628 B1, Monrad discloses use of TLLI for identity purposes, and the creation of a new "ILSI" which is an "International Link Set-up Identity" for providing international TLLI-type identification numbers for identifying a mobile station. Monrad simply does not disclose the use of TLLI number characteristics to imply a QoS rating as is required by each of the independent claims.

Because a reference is required to show every element of a claimed invention to anticipate under 35 U.S.C. 102, Olkkonen is overcome.

Claims 5,6, 12 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Olkkonen in view of Monrad. As argued above, neither Olkkonen nor Monrad disclose all of the elements required by the independent claims in the present application. In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then

without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the references must teach or suggest all the claim limitation. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the cited references, and not based on applicant's disclosure. MPEP 2143, p. 2100-121 (August 2001).

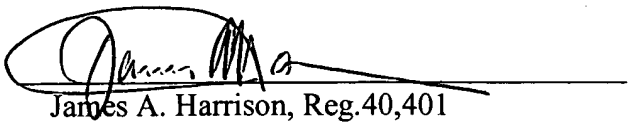
Applicant respectfully traverses this rejection in that a *prima facie* case of obviousness has not been established.

Neither Olkkonen nor Monrad teach the use of a TLLI number to imply a QoS rating for a mobile terminal. Accordingly, neither reference singly or in combination may form a proper rejection under 35 U.S.C. 102 or 35 U.S.C. 103. Accordingly, it is believed that the rejection is overcome with the originally submitted claims. Thus, the Applicants earnestly solicit a Notice of Allowance.

Please direct any questions or comments to the undersigned attorney.

Respectfully submitted,

Date: March 24, 2004

By: 

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